

In the Claims:

- 1 1. (previously presented) A die used for sealing and molding  
2 an electronic component with a resin material, having a  
3 coating layer consisting of a nickel-tungsten alloy on at  
4 least a surface thereof contacting the resin material in a  
5 melted state when the resin material is molded, wherein  
6 said coating layer is a plating layer formed of said  
7 nickel-tungsten alloy, which contains more than 20% by  
8 weight and less than 44% by weight of tungsten.

Claims 2 and 3 (canceled).

- 1 4. (original) The die of claim 1, wherein said coating layer  
2 is 1  $\mu\text{m}$  to 20  $\mu\text{m}$  in thickness.

- 1 5. (previously presented) The die of claim 1, comprising:  
2 a fixed die;  
3 a movable die arranged opposite to the fixed die;  
4 upper and lower cavities provided in said fixed die  
5 and said movable die in respective die planes thereof to  
6 face each other along a parting-line plane of said fixed  
7 die and said movable die, for molding the resin material;  
8 a concavity receiving and setting a support having the  
9 electronic component mounted thereto;  
10 a pot arranged at one of said fixed die and said  
11 movable die for supplying the resin material;

12 a plunger fit internal to said pot for applying  
13 pressure to the resin material; and

14 a resin channel to allow said pot and said upper  
15 cavity to communicate with each other for transporting the  
16 resin material in the melted state,

17 wherein said coating layer is provided on an internal  
18 surface of said upper and lower cavities, an internal  
19 surface of said resin channel, an internal surface of said  
20 concavity, an internal surface of said pot, said  
21 parting-line plane of each of said fixed die and said  
22 movable die, and an external surface of said plunger.

1 6. (original) The die of claim 5, further comprising an  
2 ejector pin ejecting and releasing from said upper and  
3 lower cavities a resin-molded body molded in said upper and  
4 lower cavities, and an ejector pin fitting hole fitting  
5 said ejector pin therein, wherein said ejector pin has an  
6 external surface provided with said coating layer and/or  
7 said ejector pin fitting hole has an internal surface  
8 provided with said coating layer.

1 7. (previously presented) The die of claim 5, wherein said  
2 resin channel includes a cull and a runner and gate  
3 arranged opposite to said pot for dispensing the resin  
4 material in the melted state, said cull and said runner and  
5 gate having an internal surface provided with said coating  
6 layer.

1 8. (original) The die of claim 5, further comprising an air  
2 vent allowing said upper cavity to communicate external to  
3 the die, said air vent having a surface provided with said  
4 coating layer.

1 9. (previously presented) The die of claim 1, wherein said  
2 nickel-tungsten alloy contains at most 40% by weight of  
3 said tungsten.

1 10. (previously presented) A molding die for molding an  
2 electronic component with a resin, comprising at least one  
3 die member body and a coating layer provided on said at  
4 least one die member body to form a surface of said molding  
5 die that is directly exposed to and directly contacts the  
6 resin for reducing adhesion of the resin on said surface,  
7 wherein said coating layer is an electroplated layer  
8 consisting of a binary alloy of nickel and from more than  
9 20 to less than 44% by weight of tungsten.

1 11. (previously presented) The molding die of claim 10, wherein  
2 said alloy contains no more than 40% by weight of said  
3 tungsten.

1 12. (previously presented) A die arrangement used for sealing  
2 and molding an electronic component with a resin material,  
3 said die arrangement comprising:  
4 a fixed die;  
5 a movable die arranged opposite to the fixed die;

6 upper and lower cavities provided in said fixed die  
7 and said movable die in respective die planes thereof to  
8 face each other along a parting-line plane of said fixed  
9 die and said movable die, for molding the resin material;

10 a concavity receiving and setting a support having the  
11 electronic component mounted thereto;

12 a pot arranged at one of said fixed die and said  
13 movable die for supplying the resin material;

14 a plunger fit internal to said pot for applying  
15 pressure to the resin material;

16 a resin channel to allow said pot and said upper  
17 cavity to communicate with each other for transporting the  
18 resin material in the melted state; and

19 a coating layer of a nickel-tungsten alloy that is  
20 provided on surfaces of said die arrangement contacting the  
21 resin material in a melted state when the resin material is  
22 molded, wherein said surfaces include an internal surface  
23 of said upper and lower cavities, an internal surface of  
24 said resin channel, an internal surface of said concavity,  
25 an internal surface of said pot, said parting-line plane of  
26 each of said fixed die and said movable die, and an  
27 external surface of said plunger, and wherein said coating  
28 layer is a plating layer formed of said nickel-tungsten  
29 alloy, which contains at least 20% by weight and at most  
30 60% by weight of tungsten.

1 13. (previously presented) The die of claim 12, further  
2 comprising an ejector pin ejecting and releasing from said

4029/WFF:ar

- 5 -

3 upper and lower cavities a resin-molded body molded in said  
4 upper and lower cavities, and an ejector pin fitting hole  
5 fitting said ejector pin therein, wherein said ejector pin  
6 has an external surface provided with said coating layer  
7 and/or said ejector pin fitting hole has an internal  
8 surface provided with said coating layer.

1 14. (previously presented) The die of claim 12, wherein said  
2 resin channel includes a cull and a runner and gate  
3 arranged opposite to said pot for dispensing the resin  
4 material in the melted state, said cull and said runner and  
5 gate having an internal surface provided with said coating  
6 layer.

1 15. (previously presented) The die of claim 12, further  
2 comprising an air vent allowing said upper cavity to  
3 communicate external to the die, said air vent having a  
4 surface provided with said coating layer.

1 16. (currently amended) A combination of an electronic  
2 component and a resin material received in a die cavity of  
3 a die used for sealing and molding the electronic component  
4 with the resin material, wherein the die has a coating  
5 layer consisting of a nickel-tungsten alloy on at least a  
6 surface of the die cavity contacting the resin material in  
7 a melted state when the resin material is molded to seal  
8 the electronic component, wherein the coating layer is a  
9 plating layer formed of the nickel-tungsten alloy, which

10 contains ~~at least~~ more than 20% by weight and ~~at most 60%~~  
11 less than 44% by weight of tungsten.

1 17. (new) The combination according to claim 16, wherein said  
2 nickel-tungsten alloy is a binary nickel-tungsten alloy,  
3 which contains at least 21% by weight and at most 43% by  
4 weight of said tungsten.

1 18. (new) The combination according to claim 17, wherein said  
2 binary nickel-tungsten alloy contains at most 40% by weight  
3 of said tungsten.

1 19. (new) The combination according to claim 18, wherein said  
2 coating layer has a thickness of 1  $\mu\text{m}$  to 20  $\mu\text{m}$ .

1 20. (new) The die of claim 9, wherein said coating layer has a  
2 thickness of 1  $\mu\text{m}$  to 20  $\mu\text{m}$ .

1 21. (new) The molding die of claim 11, wherein said coating  
2 layer has a thickness of 1  $\mu\text{m}$  to 20  $\mu\text{m}$ .

1 22. (new) The molding die of claim 11, wherein said binary  
2 alloy contains at least 21% by weight of said tungsten.

[RESPONSE CONTINUES ON NEXT PAGE]